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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/618,387

07/12/2003

Glen Gomes

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01/03/2005

MURAMATSU & ASSOCIATES

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EXAMINER

WACHSMAN, HAL D

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/618,387

Applicant(s)

GOMES ET AL.

Examiner

Hal D Wachsman

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 12 and 14 is/are rejected.
- 7) ☒ Claim(s) 2-11, 13 and 15-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1-8-04</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. The drawings are objected to because Figures 1 and 2A-2D are referred to in the Background of the Invention section of the specification but have not been labeled as "Prior Art". In addition, the descriptions for these figures in the Brief Description of the Drawings do not refer to these figures as prior art. Appropriate correction is required.
2. The Abstract is objected to because it contains purported merits (i.e. "...a unique means..."). In addition, the symbology "SPC...." in the lower left hand corner of the Abstract should be deleted. Appropriate correction is required.
3. The listing of references in the specification (see pages 2 and 16 of the specification) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.
4. The brief description for Figure 5 in the Brief Description of the Drawings refers to a Figure 3B however there is no Figure 3B in the drawings but rather there is a Figure 3. This same type of problem occurs with the brief descriptions for Figures 12A-12B and 14. Appropriate correction is required.
5. Page 24, line 8, of the specification states "It is no physically possible..." but was this intended to be "It is now physically possible...". Appropriate correction is required.
6. Claims 1-19 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the

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invention. Claim 1, lines 6-7, cite "a number of time" but was this intended to be "an amount of time" ? Claim 2, lines 2-3, cite "which causes to generate" however was this intended to be "which operates to generate" ? Claim 3, lines 3-4, cite "event count data" which it appears should be "said event count data". Claim 5, line 1, cites "summing apparatus" which should be "summing apparatus". Claim 5, line 9, cites "summing logic" which it appears should be "summing apparatus". Claim 6, lines 11-12, cite "the vernier data decompression" however the antecedent basis is "vernier data decompression logic". Claim 11, lines 6-7, cites "the *vernier* scaling logic" which lacks clear antecedent basis. Claim 12, lines 8-9, cite "the event data compressed in the event memory" which lacks antecedent basis. Claim 12, line 10, cites "the vernier data" however the antecedent basis is "event vernier data". Claim 13, line 3, cites in two locations "event data" however it appears that the antecedent basis is "event count data". Claim 17, lines 5-6, cite "the scaling counter logic" which lacks clear antecedent basis. Claim 19, lines 2-3, cite "said step of generating the window strobe logic" which lacks antecedent basis. The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1, 12 and 14, are rejected under 35 U.S.C. 102(e) as being anticipated by Turnquist et al. (6,532,561).

As per claim 1, Turnquist et al. (col. 7 lines 55-58, 65-67, col. 8 lines 1-4, 35-38, col. 10 lines 20, 23-25, col. 14 lines 34-36, col. 16 lines 17-19) disclose “an event count delay logic which produces a gross delay of event count data....by counting a clock for a number of time defined by the event count data”. Turnquist et al. (Abstract, figures 10A, 10B, col. 7 lines 26-28, 58-63, col. 8 lines 38-55, col. 12 lines 15-27, col. 16 lines 31-34) disclose “a vernier data decompression logic which reproduces event vernier data which is a fractional part of the event data”. Turnquist et al. (Abstract, figures 7, 8, 10A, 10B, 14, col. 5 lines 57-62, col. 8 lines 21-34, 46-55) disclose “an

event vernier summing logic which produces event vernier sum data by summing the vernier data from the vernier data decompression logic". Turnquist et al. (Abstract, figures 7, 13-15, col. 5 lines 49-67, col. 6 lines 1-13) disclose "an event scaling logic which changes the event count data from the event count delay logic and the event vernier data from the event vernier summing logic in proportion to a scale factor".

Turnquist et al. (Abstract, figures 7, 8, 13) disclose "wherein one or more pipelines are incorporated at least in the event vernier summing logic for processing the event vernier data in parallel".

As per claim 12, Turnquist et al. (col. 7 lines 55-58, 65-67, col. 8 lines 1-4, 35-38, col. 10 lines 20, 23-25, col. 14 lines 34-36, col. 16 lines 17-19) disclose "producing a gross delay of event count data...by counting a clock for a number of time defined by the event count data". Turnquist et al. (Abstract, figures 10A, 10B, col. 7 lines 26-28, 58-63, col. 8 lines 38-55, col. 12 lines 15-27, col. 16 lines 31-34) disclose "decompressing event vernier data which is a fractional part of the event data compressed in the event memory". Turnquist et al. (Abstract, figures 7, 8, 10A, 10B, 13, 14, col. 5 lines 57-62, col. 8 lines 21-34, 46-55) disclose "summing the vernier data based on the decompressed event vernier data...at each timing of the clock to produce event vernier sum data". Turnquist et al. (Abstract, figures 7, 13-15, col. 5 lines 49-67, col. 6 lines 1-13) disclose "modifying the event count data and the event vernier data in proportion to a scale factor".

As per claim 14, Turnquist et al. (col. 7 lines 65-67, col. 8 lines 1-4, col. 9 lines 41-45) disclose "counting the event count data by the clock and producing a

terminal count signal when a count result reaches a predetermined value". Turnquist et al. (col. 9 lines 41-56) disclose "generating an event trigger signal in response to the terminal count signal".


9. Claims 2-11, 13 and 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and subject to the appropriate correction of the 37 C.F.R. 1.75(a) objections noted in paragraph 6 above.

10. The following references are cited as being art of general interest: Le et al. (6,594,609) which disclose scan vector support for an event based test system, Gomes et al. (6,668,331) which disclose an event based test system and Turnquist (6,360,343) which discloses a delta time event based test system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Hal D Wachsman  
Primary Examiner  
Art Unit 2857

HW  
December 26, 2004